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AUTHOR Silvernail, David L.
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ABSTRACT

The purposes of the study were to design a Future World Perspective Values Scale, test the validity and reliability of the scale, and collect data on teachers' and students' values. The scale was designed to measure the four value constructs of selective economic growth, adaptive technology, international cooperation, and world economic justice. Factor analysis indicated that 28 scale items were valid measures of the four value constructs. Additionally, all four factors were found to be reliable. Descriptive data was collected on a sample of pre-service and in-service teachers, and high school students. Results showed that the teachers and students accepted future world perspective values, but students to a lesser degree than teachers. There was a significant difference between scale scores of the teachers and students. Further analysis of responses revealed that teachers and students are generally supportive of selective economic growth, international cooperation and world economic equity values. Both groups expressed mixed views with respect to adaptive technological values. (Author/GK)

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Technical Report

A VALIDATION STUDY OF A TEACHERS' GLOBAL PERSPECTIVE VALUES SCALE

David L. Silvernail

University of Southern Maine

August 1979

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TM 800 630

A Validation Study of a Teachers' Global Perspectives Values Scale

David L. Silvernail
University of Southern Maine

The events of the 1970's have forced many humans to face the reality of our "Spaceship Earth" existence. Mankind is confronted with a multitude of worldwide problems, such as exponential population growth, continued exploitation of the world's natural resources, increased environmental deterioration, an ever-increasing gap between the haves and have-nots, and the threat of nuclear war. Finding solutions to these complex problems will require man to adopt a new world perspective; what might be called a future world perspective - a multi-faceted perspective grounded in a value system that is more supportive of man and the world's ecological system.

Educators are beginning to realize the need to take a more active role in helping students acquire this future world perspective. Recently, many good curricula programs and materials designed to foster the development of this new perspective have been developed and used in classroom settings. Unfortunately, however, these materials have found their way into too few classrooms. In addition, the materials have focused, almost exclusively, on cognitive characteristics. That is, considerable effort has been directed toward helping students become more knowledgeable about world problems, differing cultures and cultural views, and the interdependent nature of the world community.

These are commendable goals, but each neglects the consideration of one component critical to any perspective. Values and attitudes play a major role in governing man's thoughts and deeds. Increased knowledge does not necessarily move us to action; the prime movers are man's ethical convictions. Thus, in addition to helping youth become more knowledgeable, educators must develop strategies to assist youth in exploring their values and beliefs.

Possibly one of the major stumbling blocks to reaching more students is the teachers themselves. Teachers' beliefs, attitudes, and especially their values influence the selection of materials and the design of classroom learning experiences. Therefore, the key to reaching more students may be in helping teachers acquire future world perspectives. However, before in-service and pre-service programs and strategies are developed it is essential to know what teachers' present beliefs and values are. The purpose of this research was to design an assessment instrument which would measure teachers' future world perspective values, to test the validity and reliability of the instrument, and to collect descriptive data of teachers' present values. A second purpose was to test the validity and reliability of the instrument for use with high school age students and to collect descriptive data on students' present values.

Future World Perspective Values

A review of the literature of futurists revealed four value constructs which influence human thinking with respect to present and future world perspectives. These four constructs reflect man's beliefs concerning (1) economic growth, (2) technological development, (3) international relations, and (4) world economic justice. Global thinkers suggest that there is a value stance for each of the four which represent a traditional world perspective and a transformational world perspective.

Writers such as Heilbroner (1), Gurley (2), and Jones (3) argue that man's belief in unrestricted economic growth must give way to a value system that supports selective economic growth. This type of economic growth encourages the development of energy and resource conservation policies, environmental protections, recycling, and varying economic growth rates for different industries and societies.

A future world perspective would also include new beliefs about technological development. According to Czbekhan (4), man must reject the "technological imperative" - the assumption that what can be done technologically should be done. Instead, man must place a high value on the development of adaptive technologies. Adaptive technologies, as Schumacher (5) suggests, are technologies based on people, not goods. They are small, simple, non-polluting, labor-intensive, and conservers of energy and non-renewable resources.

A third value construct concerns the conduct of international relations. Historically, while international competition has helped man tame the frontiers, build the industrial society, and develop higher living standards, it also has resulted in territory and resource hoarding, communication breakdowns, power elites, large military stockpiles, and, ultimately, acts of armed aggression. Many writers (6, 7, 8) believe that man's future survival and well-being depends upon his ability to replace international competition with international cooperation - cooperation which promotes disarmament programs, double-win strategies, sharing of information, and the creation of international organizations designed to mediate conflicts.

Closely related to man's values about international relations are his beliefs concerning world economic justice. Futuristic thinkers such as Amara (9) and Brown (10) argue that man's willingness to allow, and in some cases actively support, the unequal distribution of the world's economic and natural resources must be replaced by a fundamental belief in world economic equity. World economic equity is based upon the principle of natural right and reflects fairness and equality in the distribution of the world's limited resources. Belief in this type of equity would promote greater sharing of economic resources and technical know-how, equal access to the world's natural resources, reduction in consumption patterns among the industrial nations, and very possibly, the redistribution of much of the world's economic and natural resources.

In capsule form these value stances representing the traditional and transformational world perspectives are as follows:

Traditional World Perspective	Transformational World Perspective
1. Economic Growth: Belief in unrestricted economic growth. Progress is equated to the quantity of economic growth, not necessarily the quality of growth. Bigger and more is better.	1. Economic Growth: Belief in selective economic growth. Progress is equated to quality and not necessarily to quantity. Economic growth policies must take into consideration resource limitations, environmental effects, and social factors.
2. Technological Development: Belief in the technological imperative; that is, whatever can be done technologically should be done.	2. Technological Development: Belief in the development of adaptive technologies, characterized by innovations that are relatively inexpensive, easily understandable, labor and capital intensive, and adapted to prevailing social, political, and economic conditions.
3. International Relations: Belief in international competition for scarce resources, military hardware, technical know-how, and preferential trade partners.	3. International Relations: Belief in international cooperation. The development of policies that will promote disarmament programs, double-win strategies, information sharing, and international alliances.
4. World Economic Justice: Belief in the distribution of the world's resources and wealth based on factors such as inheritance, geographic location, wars, chance, and power elites.	4. World Economic Justice: Belief in the distribution of the world's resources and wealth based on equity; that is, the development of policies that encourage greater sharing of human and capital goods, equal access to natural resources, removal of trade barriers, etc.

Research Hypotheses

The following hypotheses were tested in this study:

H-1 There will be four relatively independent clusters of items on the Future World Perspective Values (FWPV) Scale representing the four value factors.

H-2 There will be a relatively high correlation between economic growth value scores and technological development value scores.

H-3 There will be a relatively high correlation between international relations value scores and world economic justice value scores.

H-4 There will be a relatively moderate correlation between economic growth value scores and world economic justice value scores.

H-5 There will be a relatively moderate correlation between technological development value scores and world economic justice value scores.

H-6 There will be a relatively low correlation between economic growth value scores and international relations value scores.

H-7 There will be a relatively low correlation between technological development value scores and international relations value scores.

H-8 There will be a high correlation between scores on the Future World Perspective Values Scale and the Social Attitudes Scale (Kerlinger).

H-9 The four value factors will be internally consistent as measures by Cronbach's Alpha Coefficient.

H-10 Teachers will be found to hold traditional world perspective values as measured by their scores on the FWPV Scale.

H-11 High school students will be found to hold transformational world perspective values as measured by their scores on the FWPV Scale.

H-12 There will be no significant differences between FWPV Scale scores for differing sex, teaching status, and teaching level variables.

Sample

The sample consisted of 459 pre-service teachers and 213 in-service teachers (N=672) in Indiana and Maine. The high school sample consisted of 103 social studies students in a suburban school district in Southern Maine.

Method

The four value constructs were used to construct two Likert-type four factor values scale. Scale items were developed on the basis of the literature review. Initial content analysis was conducted by a panel of three expert judges. Items identified by all three judges were selected for inclusion on the scale.

Each scale item was patterned after Kerlinger's (11) definition of a value statement; that is, each item was worded to be a value judgment about an abstract referent. The 40-item scale contained a six-point response continuum ranging from strongly agree to strongly disagree. For purposes of scoring, a numerical value was assigned to each choice on the response continuum. The lowest numerical value (1) was assigned to the extreme of each continuum representing the values of selective economic growth, adaptive technology, international cooperation, and world economic equity.

Two forms of the scale were developed in order to determine if item placement influenced responses. Form A scale items were assigned position based upon random assignment using a table of random numbers. Form B scale items were assigned position based on category. That is, each ten item category designed to measure a particular value construct was clustered together.

The scales, Forms A and B, and the Social Attitudes Scale (12) were administered to the sample in the fall of 1978. The Social Attitudes Scale measures liberal-conservative attitudes of respondents. The sample completed the scales under the direction and supervision of the researcher or the classroom instructor. Form A of the Future World Perspective Values Scale appears in Appendix A.

Factor analysis, Pearson correlations, and Cronbach's alpha coefficients were used to test the validity and reliability of the scales. Descriptive statistics and t-tests were used to analyze sample scores. This report does not contain an analysis of the data collected on Form B of the scale.

Data Analysis

The responses of the teacher sample to the values scale were factor analyzed to determine whether the 40-items measured four relatively independent factors. Table 1 shows the factor loadings for 28-items (Form A) and the Cronbach alpha coefficient for the four factors. The factor pattern matrix is the result of an oblique rotation where the Delta equals .3. Twelve items were eliminated from the analysis because they were found to have low communalities or to have approximately equal loadings on more than one factor.

TABLE 1

Factor Loadings of 28 Value Items

Factor Category	Item No.	I Economic Growth	II Technological Development	III International Relations	IV W/Economic Justice
I Economic Growth Alpha=.76	1	.421	.105	.257	.039
	2	.515	.408	.080	.092
	3	.553	.024	.063	.058
	4	.642	.105	.086	.124
	5	.721	.170	.004	.086
	6	.539	.185	.053	.033
	7	.391	.024	.048	.023
II Technological Development Alpha=.78	8	.147	.340	.117	.162
	9	.105	.472	.346	.218
	10	.090	.614	.353	.073
	11	.330	.587	.016	.026
	12	.102	.536	.372	.022
	13	.257	.458	.342	.044
	14	.115	.537	.395	.088
III International Relations Alpha=.74	15	.074	.190	.376	.225
	16	.096	.222	.359	.041
	17	.055	.082	.500	.117
	18	.101	.026	.712	.024
	19	.137	.189	.382	.215
	20	.179	.101	.447	.068
	21	.044	.153	.727	.035
IV World Economic Justice Alpha=.85	22	.023	.021	.223	.670
	23	.087	.035	.143	.825
	24	.175	.243	.278	.430
	25	.041	.064	.135	.859
	26	.006	.038	.056	.670
	27	.205	.121	.409	.622
	28	.157	.079	.046	.548

By designated category, all factor loadings reported in Table 1 ranged between .340 and .859 with 23 loadings between .421 and .859 and five loadings between .340 and .395. The highest factor loadings by categories were on Factor IV (world economic justice), and Factor III had relatively moderate loadings.

The seven items in Factor IV loaded from .430 to .859 and the highest non-category item had a loading of .409. Additionally, all seven items loaded higher on Factor IV than on any other factor. Similarly, Factor I had a loading range of .391 to .721 with a high non-category item loading of .408. All seven items loaded highest on Factor I.

Factors II and III had loading ranges from .340 to .614 and .359 to .727 respectively. High non-category item loading for Factor II .395 and for Factor III it was .225. All seven items loaded higher on Factor II than on any other factor. The same factor pattern was true for Factor III.

Given the analysis of Table I, H-1 of the study was accepted. That is, it was concluded that the scale contained four relatively independent clusters of items representing the four value constructs.

Cronbach's alpha coefficient was computed to test the reliability (internal consistency) of the 28-item values scale. The highest alpha coefficient was obtained for Factor IV (.85) and the lowest for Factor III (.74). Factor I had an alpha coefficient of .76 and Factor II a coefficient of .78. Thus, H-9 was accepted.

A similar factor analysis pattern and alpha coefficients were found for the student sample. However, the factor loadings and coefficients were generally lower. Thus, it was concluded that the 28-item scale is valid and reliable for use with high school age students, but that caution should be exercised in interpreting scale findings.

Hypotheses H-2 and H-3 were tested by computing correlations between the four factor categories. Table 2 reports the correlation matrix.

TABLE 2

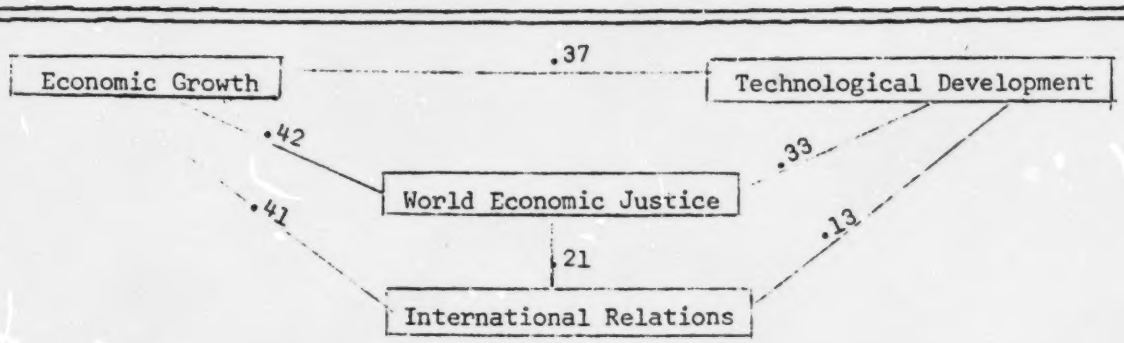
Four Factor Correlation Matrix

	Factor I	Factor II	Factor III	Factor IV
Factor I	1.000	.217	.131	.410
Factor II		1.000	.332	.422
Factor III			1.000	.374
Factor IV				1.000

Graph 1 depicts the correlation patterns between the four factors.

GRAPH 1

Four Factor Correlation Pattern



Analysis of Table 2 indicated that all the correlations were lower than anticipated. The pattern of correlations between Factors I, II, and III were as hypothesized. Correlations for Factor IV with Factors I and II did not follow the hypothesized pattern. Thus, hypotheses H-2, H-5, and H-7 were accepted and H-3, H-4, and H-6 were rejected.

The Pearson product moment correlation formula was utilized to test H-8. A significant correlation ($p < .05$) was found between scores on the FWPV Scale and the Social Attitudes Scale. However, the relationship between the two scales was moderate ($r = .45$). Hypothesis H-9 was rejected. It was concluded that the world perspective values and liberal-conservative attitudes of pre-service and in-service teachers are related, but not as strongly as might be expected.

Table 3 reports the 28-item mean scores and standard deviations for the teacher sample (Form A). Item responses ranged from 1, which indicated strong agreement with the value statement, to 6, which indicated strong disagreement with the item. The possible score range was 28-168. A score of 28 represented a strong belief in the values of the transformational world perspective.

TABLE 3

Mean Scores and Standard Deviations of Teacher Sample

Source	N	Mean	Standard Deviation
Sex:			
Male	90	68.78	16.80
Female	206	66.81	16.02
Teaching Status:			
Preservice	178	68.13	15.60
Inservice	128	65.96	17.47
Teaching Level:			
Elementary	153	66.46	15.87
Secondary	90	69.11	15.34

No significant differences were found for sex, teaching status and teaching level. A middle score on the 28-item scale would be 98. Thus, H-10 was rejected; that is, teachers were not found to hold traditional world perspective values. On the contrary, it was concluded that the teacher sample held transformational world perspective values.

Table 4 reports the 28-item mean scores and standard deviations for the student sample. Again, the possible score range was 28-168.

TABLE 4

Mean Scores and Standard Deviations of Student Sample

Source	N	Mean	Standard Deviation
Sex:			
Male	53	86.67	13.60
Female	49	82.16	14.38

A significant difference was found for sex in the student sample ($p < .05$). Additionally, there was a significant difference between the mean scores of the teacher and student samples ($p < .05$). The student sample mean was less than 98, and thus, H-11 was rejected. Given that the student mean score was higher than the teacher mean score, it was concluded that, although both samples support transformational world perspective values, teachers are more supportive.

Table 5 reports the distribution of responses for the 28-item scale for the teacher and student samples. The student distributions are listed below the teacher distributions. All numbers are percentages rounded-off to the nearest whole numbers. Asterisks denote reversed items; that is, strong disagreement with the item would indicate strong agreement with the transformational world perspective value.

A cursory review of the table indicates that a majority of the respondents were in agreement with the items in Factors I, III, and IV. Responses to Factor II items were normally distributed along the response continuum. The reader is encouraged to study the table and formulate his/her own conclusions. However, some global conclusions are in order here. These conclusions are:

1. Teachers are more supportive than high school students of transformational world perspective values.

2. Teachers are most supportive of selective economic growth values and least supportive of adaptive technological and world economic equity values.

3. Students are more supportive than teachers of world economic equity values.

4. Teachers and students hold similar values with respect to the conduct of international relations.

5. Teachers and students generally are undecided about the value of technological developments for solving problems.

6. Teachers and students support the general concept of world economic equity, but not necessarily the specifics of that concept as it applies to their country.

TABLE 5

Distribution of Responses for the 28-Item Scale

Item	Response					
	Strongly Agree	Agree	Mildly Agree	Mildly Dis-Agree	Dis-Agree	Strongly Disagree
ECONOMIC GROWTH						
1. Citizens of my country should be encouraged to purchase consumer goods made of recyclable materials.	43	39	14	3	0	1
	23	40	22	3	8	4
*2. Technological breakthroughs should be encouraged regardless of their potential side effects.	0	2	10	13	36	39
	6	17	26	17	21	13
3. The goals of improving human services should be more important than producing more goods that are wasteful of energy and raw materials.	41	41	12	4	1	1
	31	25	17	15	8	4
4. More attention should be given to the development of technologies that are energy efficient.	54	35	5	3	2	1
	24	38	16	13	7	2
5. Industries in my country should produce more economic goods designed to conserve energy sources.	41	44	11	0	2	2
	24	35	22	8	8	3
*6. Citizens of my country should be entitled to pursue whatever materialistic standard of living they desire, regardless of the effects on our environment or natural resources.	4	2	6	12	39	37
	14	9	14	15	20	28
7. The potential social and psychological problems resulting from a technological innovation should be assessed prior to the development of the technology.	37	42	14	3	3	1
	18	16	42	15	8	1

TABLE 5--Continued

Item	Response					
	Strongly Agree	Agree	Mildly Agree	Mildly Dis-Agree	Dis-Agree	Strongly Disagree
TECHNOLOGICAL DEVELOPMENT						
*8. The present distribution of the world's wealth and resources should be maintained because it promotes the survival of the fittest.	4	7	16	21	35	17
	7	25	35	14	13	6
*9. Increases in industrial production and expansion are the true indicators or progress.	3	13	21	22	23	18
	16	30	20	17	13	4
*10. More technological breakthroughs are our only hope for improving the quality of life.	3	15	23	19	25	15
	11	26	28	11	13	12
*11. The development of new technologies is the key to progress and thus worth any problems it might create.	1	5	17	23	29	28
	15	16	30	16	14	9
*12. All that is needed to solve many of our social and economic problems is more technological breakthroughs.	3	4	7	28	34	24
	9	15	32	22	14	8
*13. My country has a right to increase its share of the world's wealth and resources regardless of the effects on less developed countries.	1	4	15	21	37	22
	11	16	27	22	13	11
*14. Technological progress is worth the cost to our environment and natural resources.	2	3	5	10	27	53
	11	13	29	13	11	23

TABLE 5--Continued

Item	Response					
	Strongly Agree	Agree	Mildly Agree	Mildly Dis-Agree	Dis-Agree	Strongly Disagree
INTERNATIONAL RELATIONS						
15. Concessions on the part of my country to other nations are morally right if the concession will promote world peace.	25	47	20	2	3	3
	24	39	29	4	2	2
*16. My country should not participate in a worldwide disarmament program even if other nations agree to the program.	4	7	15	13	23	38
	12	13	20	20	18	17
17. The existence of world peace-keeping organizations should be more important than large military stockpiles as a deterrant to potential aggressions.	30	40	16	5	6	3
	19	36	26	11	6	2
18. The primary goal of my country's foreign policy should be to promote peaceful resolutions of international conflicts.	31	39	19	6	4	1
	28	25	28	12	4	3
*19. My country should participate in international cooperative activities only if it has something to gain.	3	2	14	14	44	23
	12	17	22	23	15	11
20. A policy of maximum international cooperation is morally superior to a policy of international competition.	32	36	20	10	2	0
	10	22	33	20	10	5
21. My country should support an organization such as the United Nations in its efforts to settle international disputes and solve world-wide problems.	48	37	13	1	1	0
	41	28	17	9	[illegible]	4

TABLE 5--Continued

Item	Response					
	Strongly Agree	Agree	Mildly Agree	Mildly Dis-Agree	Dis-Agree	Strongly Disagree
WORLD ECONOMIC JUSTICE						
22. Economic justice requires that the world's wealth and resources be redistributed among all the people of the world.	10 13	16 22	25 30	20 15	18 13	11 7
23. We have a moral obligation to share our country's wealth with the less fortunate people of the world.	13 24	32 29	31 13	11 9	8 10	5 10
24. Every nation should have an equal opportunity to acquire the world's natural resources.	14 24	34 30	24 22	16 7	9 9	3 8
25. The rich nations should share their wealth with the less fortunate people of the world.	14 32	39 23	25 24	10 10	8 5	4 6
26. The rich nations are morally obligated to take whatever measures are necessary to raise the living standard of the less fortunate people of the world.	9 22	26 20	32 24	20 16	8 9	5 7
27. My country does not have a moral obligation to share its technological and economic riches with the less fortunate people of the world.	6 10	6 17	14 23	19 16	33 15	22 19
28. My country owes nothing to the less fortunate people of the world.	3 8	4 18	5 22	15 13	33 9	40 30

Summary and Conclusions

The intent of this research was to design a future world perspective values scale, to test the validity and reliability of the scale, and to collect descriptive data on teachers' and students' values. The scale was designed to measure the four value constructs of selective economic growth, adaptive technology, international cooperation, and world economic justice. The results of a factor analysis indicated that 28 items on the scale were valid measures of four relatively independent value constructs. Additionally, all four factors were found to be reliable.

Descriptive data was collected on a sample of pre-service and in-service teachers, and high school age students. The results showed that the teacher sample accepted transformational world perspective values with no significant difference between acceptance levels of males or females, pre-service or in-service teachers, and elementary or secondary teachers. The student sample was also accepting of transformational world perspective values, but to a lesser degree than the teacher sample. There was a significant difference between male and female students, and a significant difference between the scale scores of the teacher and student samples.

The distribution patterns of responses showed that the teachers and students are generally supportive of selective economic growth, international cooperation, and world economic equity values. Both samples expressed mixed views with respect to adaptive technological values.

Although the results of this study are somewhat limited by sample characteristics, they do suggest that teachers and students accept transformational world perspective values. They also suggest areas for further research. Research is needed on teachers, and students, who represent different age groups, formal educational backgrounds, years of educational experiences, and regional locations. Finally, the relationships between values, attitudes, and behavior need to be explored. These research studies are the necessary next steps in efforts to help educators and students acquire future world perspectives.

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Appendix A

Future World Perspective Values Scale

(Form A)

SOCIAL OPINION QUESTIONNAIRE

Directions

The 40 statements that follow are opinions about social issues. We are asking you to indicate how strongly you agree or disagree with each statement. There are no trick statements and there are no "right" or "wrong" answers. The only correct answer is the one which best reflects your true opinion toward each statement.

Questionnaire items such as these are often very difficult to answer if you think about them for a long time. Please work quickly through the statements, recording your first reaction to each on the answer sheet. Here is how you should record your reactions:

Think of the answer choices as a ladder. The higher on the ladder you go, the more you agree with the statement.	=1= STRONGLY AGREE =2= AGREE =3= MILDLY AGREE =4= MILDLY DISAGREE =5= DISAGREE =6= STRONGLY DISAGREE

Do not answer on the questionnaire itself. Your instructor will provide you with an answer sheet labeled:

SOCIAL OPINION QUESTIONNAIRE ANSWER SHEET

Please provide the data requested at the top of the answer sheet and then record your reaction to the 40 statements that follow. Remember to respond to each statement as rapidly as possible.

Think of the answer choices as a ladder. The higher on the ladder you go, the more you agree with the statement.	=1= STRONGLY AGREE =2= AGREE =3= MILDLY AGREE =4= MILDLY DISAGREE =5= DISAGREE =6= STRONGLY DISAGREE

DIRECTIONS: Record your reactions to these statements on the answer sheet. Please do not write on the questionnaire itself.

1. Concessions on the part of my country to other nations are morally right if the concessions will promote world peace.

2. The present distribution of the world's wealth and resources should be maintained because it promotes the survival of the fittest.

3. My country should not participate in a world-wide disarmament program even if other nations agree to the program.

4. Economic justice requires that the world's wealth and resources be redistributed among all the people of the world.

5. We have a moral obligation to share our country's wealth with the less fortunate people of the world.

6. Every nation should have an equal opportunity to acquire the world's natural resources.

7. Increases in industrial production and expansion are the true indicators of progress.

8. Technologies should be developed which make work more creative and provide workers with feelings of self-fulfillment.

9. The rich nations should share their wealth with the less fortunate people of the world.

10. More technological breakthroughs are our only hope for improving the quality of life.

11. The development of new technologies is the key to progress and thus worth any problems it might create.

12. My country should promote the welfare of all the world's people even though it may be against America's national interests.

13. The existence of world peace-keeping organizations should be more important than large military stockpiles as a deterrent to potential aggressors.

14. All that is needed to solve many of our social and economic problems is more technological breakthroughs.

Think of the answer choices as a ladder. The higher on the ladder you go, the more you agree with the statement.	=1= STRONGLY AGREE =2= AGREE =3= MILDLY AGREE =4= MILDLY DISAGREE =5= DISAGREE =6= STRONGLY DISAGREE

DIRECTIONS: Record your reactions to these statements on the answer sheet. Please do not write on the questionnaire itself.

15. Citizens of my country should be willing to live with fewer materialistic goods in the future.

16. The rich nations are morally obligated to take whatever measures are necessary to raise the living standards of the less fortunate people of the world.

17. My country has a right to increase its share of the world's wealth and resources regardless of the effects on less developed countries.

18. The primary goal of my country's foreign policy should be to promote peaceful resolution of international conflicts.

19. My country should participate in international cooperative activities only if it has something to gain.

20. My government should promote economic growth policies which will conserve natural resources and protect the environment.

21. My country does not have a moral obligation to share its technological and economic riches with the less fortunate people of the world.

22. Technological progress is worth the cost to our environment and natural resources.

23. My country should join with other nations in developing cooperative humanitarian programs to solve world-wide problems.

24. More attention should be given to the development of technologies that are energy efficient.

25. Technological breakthroughs should be encouraged regardless of their potential side effects.

26. A policy of maximum international cooperation is morally superior to a policy of international competition.

27. The goal of improving human services should be more important than producing more goods that are wasteful of energy and raw materials.

Think of the answer choices as a ladder. The higher on the ladder you go, the more you agree with the statement.	=1= STRONGLY AGREE =2= AGREE =3= MILDLY AGREE =4= MILDLY DISAGREE =5= DISAGREE =6= STRONGLY DISAGREE

DIRECTIONS: Record your reactions to these statements on the answer sheet. Please do not write on the questionnaire itself.

28. My country should support an organization such as the United Nations in its efforts to settle international disputes and solve world-wide problems.

29. My country should pay attention only to our national problems and not concern itself with the affairs of other nations.

30. Industries in my country should produce more economic goods designed to conserve energy sources.

31. The potential social and psychological problems resulting from a technological innovation should be assessed prior to the development of the technology.

32. My country owes nothing to the less fortunate people of the world.

33. The cost of using up non-renewable resources should be included in the price of consumer goods.

34. We should strive to develop technological innovations which are inexpensive and simple to understand.

35. In my country new industries should be encouraged to locate in economically depressed areas.

36. My country should participate in only those international agreements which will benefit our people.

37. Citizens of my country should be encouraged to purchase consumer goods made of recyclable materials.

38. My country should strive to increase its annual rate of economic growth regardless of the cost to our environment and natural resources.

39. Industrial management in my country should strive to reduce worker alientation.

40. Citizens of my country should be entitled to pursue whatever materialistic standard of living they desire, regardless of the effects on our environment or natural resources.

PLEASE CHECK YOUR ANSWER SHEET TO BE SURE THAT YOU HAVE RECORDED YOUR REACTIONS TO ALL 40 STATEMENTS.